Mr. Scott Kuhn Director of Regulatory Communications Safety Kleen P. O. Box 11393 Columbia, South Carolina 29211

Dear Mr. Kuhn:

Thank you for your letter of December 15, 1998 describing a pharmaceutical company waste that contains, among other constituents, human blood serum and less than 2 percent thimerosal, an organomercurial chemical. The waste leaches 2 mg/L mercury, which would make the waste a characteristic hazardous waste with the RCRA waste code D009. You also indicate that the waste meets none of the criteria of 40 CFR 268.3(c) and is therefore prohibited from combustion. You ask for a variance from the prohibition on combustion of this metal-bearing waste, which would allow the waste to be managed by incineration.

Assuming that the waste is a wastewater or *a Low Mercury Subcategory* nonwastewater, we agree that the waste would be prohibited from combustion unless one of the criteria of 40 CFR 268.3(c) was met. However, further information is needed on the availability or unavailability of alternative treatment avenues. For example, your letter indicates various attempts to pursue landfilling, wastewater treatment, and medical waste incineration but, unfortunately, does not provide any documentation regarding these attempts. One avenue not mentioned is the availability or unavailability of alternative oxidation technologies, which could be employed to achieve destruction of the organomercuric thimerosal and organics prior to subsequent treatment of inorganic mercury remaining in the residuals. The Agency is aware that such vendors exist.

Without a fully-documented demonstration that the waste cannot be treated by any alternative technology or the absence of such a technology, the Agency is not able to make a full evaluation of your request at this time. Should you be able to demonstrate that no technology exists that can treat the subject waste, then you may

petition for a variance from the prohibition on combustion under 40 CFR 260.20. We note that it would be useful to provide detailed information including certifications from potential alternative technology vendors in support of any such petition.

My staff has also pointed out that mercury (molecular weight 200.57) is 49.6 percent the molecular weight of thimerosal (molecular weight 404.81). Therefore, nonwastewaters that contain 524.76 mg/kg or 0.0525 percent thimerosal, that is they are greater than 260 mg/kg mercury, would be in the *High Mercury-Organic Subcategory* for which the treatment standard is IMERC or RMERC. IMERC is incineration in units operated in accordance with the technical operating requirements of 40 CFR Part 264 subpart O and Part 265 subpart O. Because IMERC is the specified and required treatment technology, wastes in this high mercury subcategory may be combusted under federal regulations in accordance with applicable operating requirements. See 40 CFR 268.3(c)(5).

Should you require further assistance, please feel free to contact me or John Austin at 703-308-0436 or Rita Chow at 703-308-6158 of my staff.

Sincerely yours,

Elizabeth A. Cotsworth, Acting Director Office of Solid Waste